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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,993	10/14/2003	Owen T. Richard	200208305-1	4755

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EXAMINER
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TRAN, DUE NGOC

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/684,993

Applicant(s)

RICHARD ET AL.

Examiner

Due N. Tran

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (US 6,377,445) in view of Hooper (US 6,746,254).
2. With respect to claim 1, Davis discloses a printed circuit board assembly mounting system comprising: a chassis support (Fig. 6 element 104) having at least one keyhole (Fig. 6 element 108), the keyhole adapted to receive a mounting post coupled to a printed circuit board assembly (Fig. 5 element 110), the mounting post adapted to slidably engage the keyhole to secure the printed circuit board assembly to the chassis support (Fig. 6 and page 7, col. 2, lines 58-63), however, Davis does not disclose expressly wherein the chassis support further having at least one guide adapted to align the mounting post with the keyhole.

The Hooper reference, however, discloses a chassis support having at least one guide adapted to align the mounting post with the keyhole (Fig.7 element 32).

Davis and Hooper are analogous art because they are from the same filed of endeavor. (Circuit board mounting system).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add a guide to the circuit board system of Davis.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Hooper in page 10, col. 4 lines 48-50 that by adding the guide to the circuit board system may support a portion of the circuit board and may impart additional structural stability to the circuit board.

Therefore, it would have been obvious to combine Hooper with Davis for the benefit of being able to support and stabilize the circuit board to obtain the invention as specified in claim 1.

3. With respect to claims 2, 3, 4, and 7, Hooper discloses a printed circuit board assembly mounting system wherein the guide comprises integrally formed tabs of the mounting support (Fig. 2 element 40), wherein the guide comprises at least one pair of oppositely facing tabs (Fig. 7 element 32), wherein the guide comprises at least one pair of tabs disposed spaced apart from each other corresponding to a lateral dimension of the printed circuit board assembly (Fig. 7 element 32), wherein the guide is capable to restrict lateral movement of the printed circuit board assembly.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Hooper in page 10, col. 4 lines 48-50 that by adding the guide to the circuit board system may support a portion of the circuit board and may impart additional structural stability to the circuit board.

4. With respect to claims 5 and 6, Hooper discloses a printed circuit board assembly mounting system wherein a grounding element adapted to be coupled to the

mounting post and the grounding element extending from the printed circuit board assembly to the chassis support (Fig. 5 element 28 and page 10, col. 4, lines 27-29).

5. With respect to claim 8, Davis discloses a printed circuit board assembly mounting system comprising a mounting post coupled to a printed circuit board assembly (Fig. 5 element 110); and a computer chassis having at least one support member (Fig. 6 element 104), the support member having a keyhole adapted to receive the mounting post (Fig. 6 element 108, the mounting post adapted to slidably engage the keyhole to secure the printed circuit board assembly to the support member (Fig. 6 and page 7, col. 2, lines 58-63), however, Davis does not disclose expressly wherein the support member further having at least one guide adapted to align the mounting post with the keyhole.

The Hooper reference, however, discloses a support member having at least one guide adapted to align the mounting post with the keyhole (Fig.7 element 32).

Davis and Hooper are analogous art because they are from the same filed of endeavor. (Circuit board mounting system).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add a guide to the circuit board system of Davis.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Hooper in page 10, col. 4 lines 48-50 that by adding the guide to the circuit board system may support a portion of the circuit board and may impart additional structural stability to the circuit board.

Therefore, it would have been obvious to combine Hooper with Davis for the benefit of being able to support and stabilize the circuit board to obtain the invention as specified in claim 8.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 2.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 3.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 5.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 6.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 4.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 7.

12. With respect to claim 15, Davis discloses a printed circuit board assembly mounting system comprising a printed circuit board assembly (Fig. 5 element 106); a chassis support member (Fig. 6 element 104); means for releasably coupling the printed circuit board assembly to the chassis support member (Fig. 5 element 110); means formed in the chassis support member for enabling slidable engagement of the coupling means with the chassis support member (Fig. 6 and page 7, col. 2, lines 58-63), however, Davis does not disclose expressly the chassis support member further having means for aligning the coupling means with the means for enabling slidable engagement.

The Hooper reference, however, discloses a chassis support member having means for aligning the coupling means with the means for enabling slidable engagement (Fig.7 element 32).

Davis and Hooper are analogous art because they are from the same filed of endeavor. (Circuit board mounting system).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add a guide to the circuit board system of Davis.

The suggestion or motivation for doing so would have been obvious in view of the teaching of Hooper in page 10, col. 4 lines 48-50 that by adding the guide to the circuit board system may support a portion of the circuit board and may impart additional structural stability to the circuit board.

Therefore, it would have been obvious to combine Hooper with Davis for the benefit of being able to support and stabilize the circuit board to obtain the invention as specified in claim 15.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 7 wherein the means for aligning (guide) comprises means for restricting lateral movement of the printed circuit board assembly.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 5 wherein grounding means (grounding element) coupled to the coupling means (mounting post).

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 4 wherein the means for aligning (guide) comprises a plurality of tabs having a lateral spacing corresponding to a lateral dimension of the printed circuit board assembly.

16. Claim 19 is rejected under 35 U.S.C. 103(a) as being corresponding to claim 3 wherein the means for aligning (guide) comprises at least one pair of tabs.

***Relevant Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. The Bloomfield et al (US 6,799,980) and Mayer (US 6,695,629) references disclose the slidable keyhole and the grounding element coupled to the mounting post.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Due N. Tran whose telephone number is (571) 272-5984. The examiner can normally be reached on Monday-Thursday, 9:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DT

  
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